Date: Mon, 7 Mar 94 04:30:09 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

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Precedence: Bulk

Subject: Info-Hams Digest V94 #257

To: Info-Hams

Info-Hams Digest Mon, 7 Mar 94 Volume 94 : Issue 257

Today's Topics:

Daily Summary of Solar Geophysical Activity for 06 March

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We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 7 Mar 1994 00:01:57 MST

From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!

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Subject: Daily Summary of Solar Geophysical Activity for 06 March

To: info-hams@ucsd.edu

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

06 MARCH, 1994

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 065, 03/06/94 10.7 FLUX=095.5 90-AVG=106 SSN=101 BKI=2222 1223 BAI=007 BGND-XRAY=B1.2 FLU1=4.3E+06 FLU10=1.9E+04 PKI=2233 1223 PAI=009 BOU-DEV=015,017,016,013,006,012,015,033 DEV-AVG=015 NT SWF=00:000 XRAY-MAX= C2.3 @ 1237UT XRAY-MIN= A8.9 @ 0710UT XRAY-AVG= B1.7 PCA-MAX= +0.1DB @ 2320UT PCA-MIN= -0.4DB @ 0850UT PCA-AVG= -0.0DB BOUTF-MAX=55342NT @ 2352UT BOUTF-MIN=55315NT @ 1858UT BOUTF-AVG=55324NT GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000 GOES6-MAX=P:+141NT@ 1820UT GOES6-MIN=N:-083NT@ 0357UT G6-AVG=+092,+033,-032 FLUXFCST=STD:098,100,101;SESC:098,100,101 BAI/PAI-FCST=020,025,025/025,030,030 KFCST=3454 4433 4454 4444 27DAY-AP=054,056 27DAY-KP=4647 65*3 6566 6455 WARNINGS=*GSTRM; *AURMIDWCH ALERTS=

!!END-DATA!!

NOTE: The Effective Sunspot Number for 05 MAR 94 is not available. The Full Kp Indices for 05 MAR 94 are: 1+ 1- 1+ 2-10 1- 2- 3-The 3-Hr Ap Indices for 05 MAR 94 are: 5 3 5 6 4 3 6 11 Greater than 2 MeV Electron Fluence for 06 MAR is: 7.5E+06

SYNOPSIS OF ACT

SUMMARY COVERS THE PERIOD FROM 05/2100Z TO 06/2100Z:

Solar activity was low. An optically uncorrelated C2 x-ray event was recorded at 06/1237Z. Region 7682 (S19W81) has declined in area and spot number and produced no activity this period. Regions 7680 (S11W29) and 7685 (S08E09) were the most active producing numerous B-class/SF flares. Two new regions were numbered this period: Region 7686 (NO8W46) and Region 7687 (N18E16). Since appearing on the disk, both new regions have shown white light growth. All other regions are quiet and stable.

Solar activity forecast: solar activity is expected to be very low to low. Regions 7685,7686, and 7687 all have the potential for producing C-class activity.

The geomagnetic field has been at mostly quiet to unsettled levels the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled to active for the next three days with minor storm conditions expected at high latitudes on days two and three.

STD: Levels of geomagnetic activity have increased to active

levels just prior to the release of this report (early on 07 March). It would appear that the coronal-hole related disturbance has arrived. Minor storming has been observed over many high latitude sites over the last 3 hours (07/00Z to 03Z). Levels of auroral activity have likewise increased with only a slight equatorward migration of the northern oval apparent at the present time. Local night-sector substorming should produce moderate levels of auroral activity over the next several days.

Event probabilities 07 mar-09 mar

Class M 05/05/05 Class X 01/01/01 Proton 01/01/01 PCAF Green

Geomagnetic activity probabilities 07 mar-09 mar

A. Middle Latitudes

Active 20/25/25
Minor Storm 15/25/30
Major-Severe Storm 10/15/15

B. High Latitudes

Active 25/30/35 Minor Storm 20/30/35 Major-Severe Storm 10/20/20

HF propagation conditions were normal over all regions. Some regions experienced notable enhancements in both signal quality and MUF. Conditions are presently (early on 07 March) beginning to wane, with poor propagation being observed over some high latitude sites. Poor to very poor propagation is expected over the next 48 to 72 hours on transpolar and transauroral circuits. Middle latitudes should see good to fair propagation with occasional night-sector poor propagation. No improvements are expected for at least the next 48 to 72 hours.

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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE 7680 S11W29 020 0000 BXO 02 002 BET

7682 \$19W81 073 0100 CAO 11 007 BET
7684 \$08W16 007 0010 BXO 03 003 BET
7685 \$08E09 342 0100 DAO 07 014 BET
7686 N08W46 037 0030 CRO 04 005 BET
7687 N18E16 335 0040 BXO 04 010 BET
7678 \$11W52 043 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 06 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 06 MARCH, 1994

·

BEGIN MAX END LOCATION TYPE SIZE DUR II IV 06/1752 B1818 N17E23 DSF B2.9 24

INFERRED CORONAL HOLES. LOCATIONS VALID AT 06/2400Z

ISOLATED HOLES AND POLAR EXT

EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN

NONE VISIBLE

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

| Date | Begin | Max | End | Xray | 0р | Region | Locn | 2695 | MHz | 8800 | MHz | 15.4 (| GHz |
|---------|-------|------|------|------|----|--------|--------|------|-----|------|-----|--------|-----|
| | | | | | | | | | | | | | |
| 05 Mar: | 0000 | 0003 | 0006 | B4.3 | | | | | | | | | |
| | 0348 | 0352 | 0354 | B2.5 | | | | | | | | | |
| | 1211 | 1223 | 1241 | B3.7 | SF | 7682 | S17W66 | | | | | | |
| | 1350 | 1351 | 1354 | B1.6 | SF | 7680 | S13W08 | | | | | | |
| | 1848 | 1851 | 1853 | B2.7 | | | | | | | | | |
| | 2229 | 2230 | 2235 | | SF | 7680 | S11W14 | | | | | | |
| | 2301 | 2304 | 2306 | B2.4 | | | | | | | | | |

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

2 0 0 0 0 0 002 (28.6) 1 0 0 0 0 001 (14.3) Region 7680: 0 0 0 Region 7682: 0 0 0 0 0 0 0 Uncorrellated: 0 0 0 004 (57.1)

Total Events: 007 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations ----------NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

ΙΙ = Type II Sweep Frequency Event

III = Type III Sweep ΙV = Type IV Sweep = Type V Sweep

Continuum = Continuum Radio Event Loop = Loop Prominence System,

Spray = Limb Spray, Surge = Bright Limb Surge,

EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

End of Info-Hams Digest V94 #257 ******** *********